

AN IMPROVED METHOD FOR OBSERVING THE INTERIOR OF GRAPHITE TUBES

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The usual procedure for inspecting graphite tube interiors while the tube is in the graphite furnace is to illuminate the interior with light from a hollow cathode lamp and then examine it with a dental mirror. Using a Perkin-Elmer 703 atomic absorption spectrophotometer and an HGA[®]-400 graphite furnace, the following procedure has resulted in improved observation of the tube interior. This procedure has been used during program operation to observe processes occurring inside the tube, to observe tube orientation, and to check alignment of an AS-1 automatic pipettor.

A sheet of aluminum foil, dull side facing the furnace, is placed between the hollow cathode lamp and the furnace; consequently, no light from the lamp passes through the furnace. Light from a 60-watt bulb is then reflected from the aluminum foil surface and through the interior of the graphite tube which is observed with a dental mirror. The improved observation of the tube resulting from this procedure is of particular benefit when using a Lvov platform.

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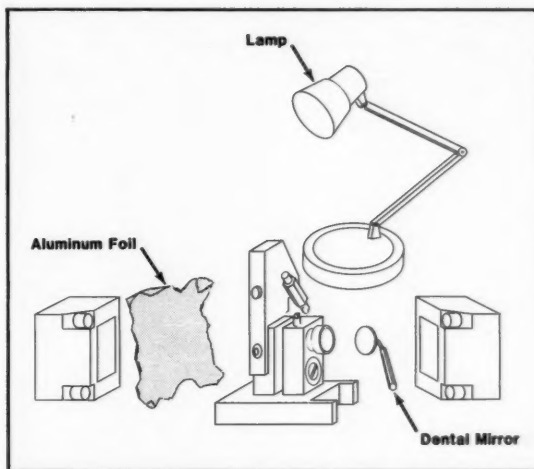


Fig. 1. Equipment configuration for observing tube interiors.

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